



NSF INCLUDES – Preparing a Conference Grant Proposal (DCL 16-081)

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National Science Foundation

INCLUSION ACROSS THE NATION OF
COMMUNITIES OF LEARNERS OF
UNDERREPRESENTED DISCOVERERS IN
ENGINEERING AND SCIENCE



OUTLINE

- ❖ NSF INCLUDES Goals and Overview
- ❖ NSF INCLUDES Components
- ❖ Brief overview of Launch Pilots, Alliances and the National Network
- ❖ Conference Proposals to Inform the Design of Backbone Organizations
- ❖ Merit Review Criteria
- ❖ Useful Resources
- ❖ Questions?



NSF INCLUDES

Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science

Comprehensive initiative to enhance U.S. leadership in science and engineering by seeking and developing STEM talent from all sectors and groups in our society

Long-term goal

Support innovative models, networks, partnerships, and research that enable the U.S. science and engineering workforce to thrive by ensuring that all groups are represented in percentages comparable to their representation in the U.S. population

FY 2016: NSF 16-544, 16-081, \$15.5M
FY 2017 Budget Request \$16M





NSF INCLUDES Key Multi-year goals

Synthesize and build research base for broadening participation; spread and adapt proven effective practices

Support local/regional and discipline-specific or crosscutting partnerships and networks – NSF INCLUDES Alliances – and support an NSF INCLUDES National Network



Three Essential Components of NSF INCLUDES

INCLUDES Design and Development Launch Pilots

INCLUDES Alliances

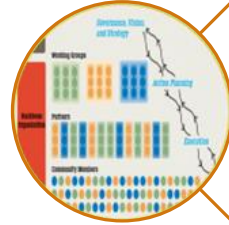
INCLUDES Backbone Organization

- Alliance-specific Backbone
- NSF INCLUDES National Network Backbone

Key elements NSF INCLUDES is looking for



Novel systems approaches and collective impact-style strategies



New research, models, networks, and partnerships to scale social innovations

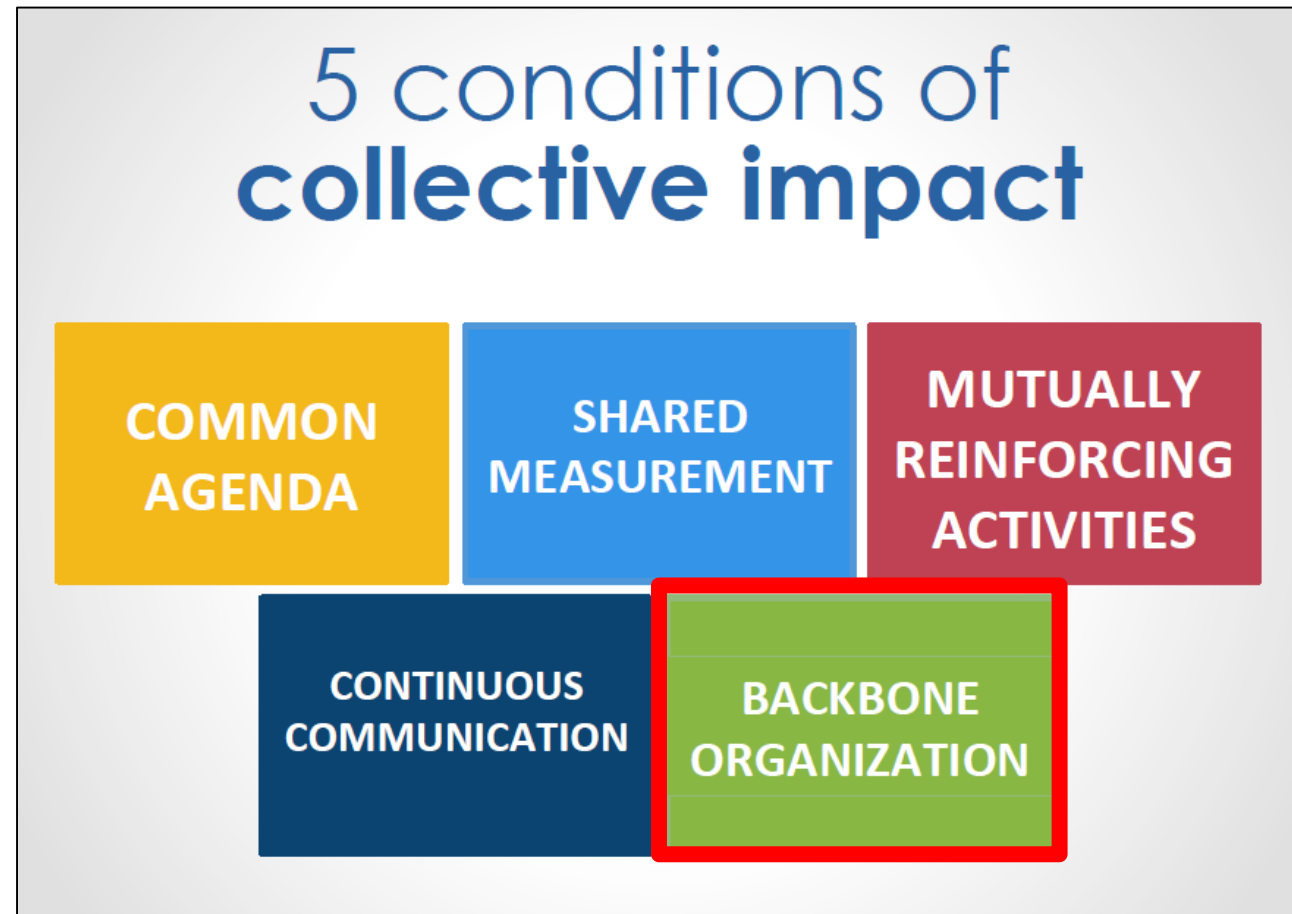


Leverage the current Broadening Participation Portfolio



Collaborative alliances spanning education levels, public and private sectors,...

Collective Impact*- style approaches to scaling social innovation



* Kania, M. Kramer, Stanford Social Innovation Review, 2011



Design and Development Launch Pilots – NSF 16-544

Invited to submit full proposals by June 24, 2016

- ❖ Pilot projects testing bold and innovative approaches to solving broadening participation challenges
- ❖ Provide models or prototypes for collective efforts that will increase the participation of groups traditionally underserved and underrepresented in STEM
- ❖ Identify measurable goals and objectives
- ❖ Present bold and innovative approaches for solving broadening participation challenges in STEM and articulate the potential for scaling
- ❖ Deliver models or prototypes for collective efforts to increase the participation of underrepresented groups in STEM
- ❖ Identify teams of local, regional, national, and/or disciplinary-based partners and justify the contribution of team members

Each Design and Development Launch Pilot will be funded for up to 2 years and \$300,000

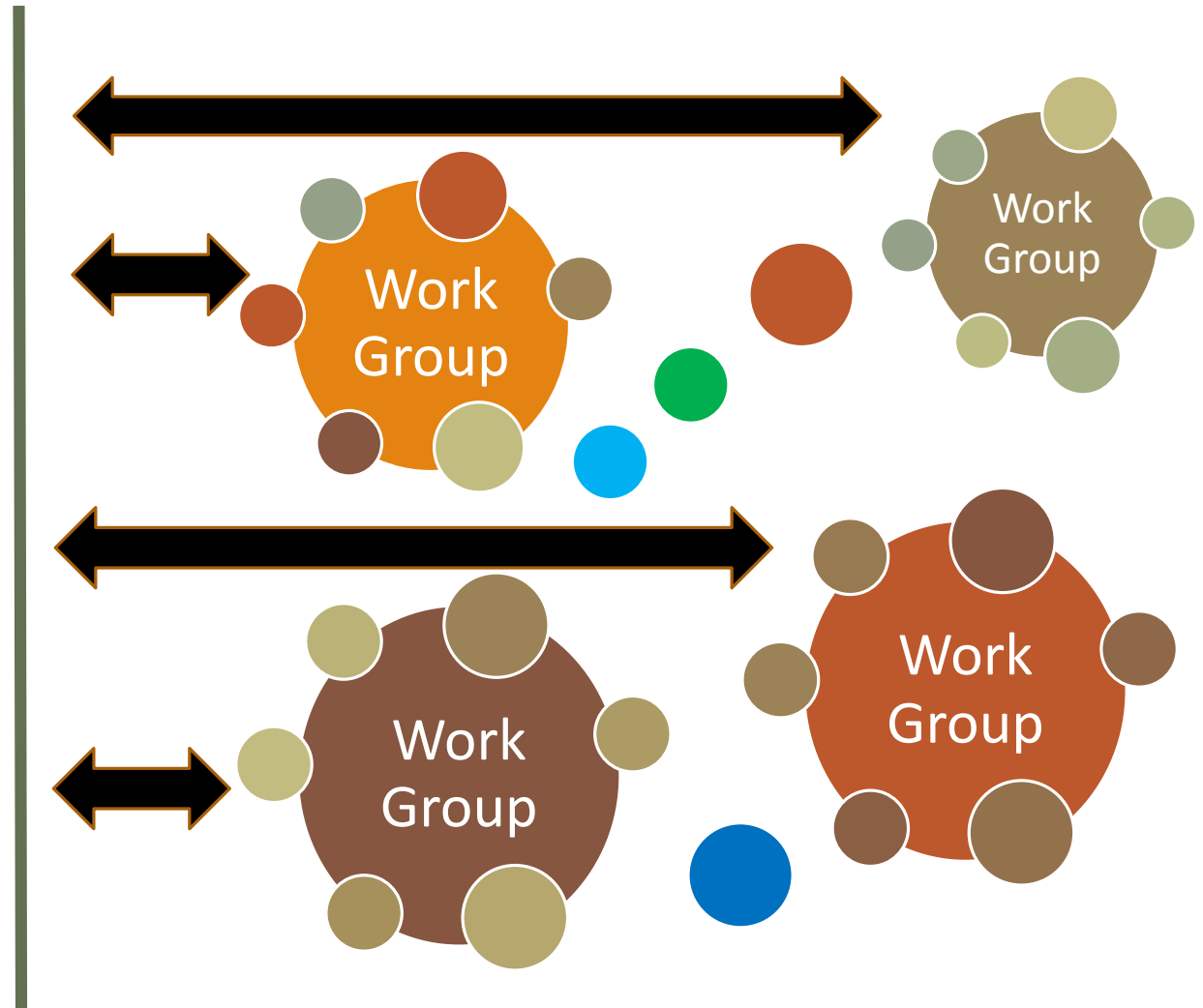
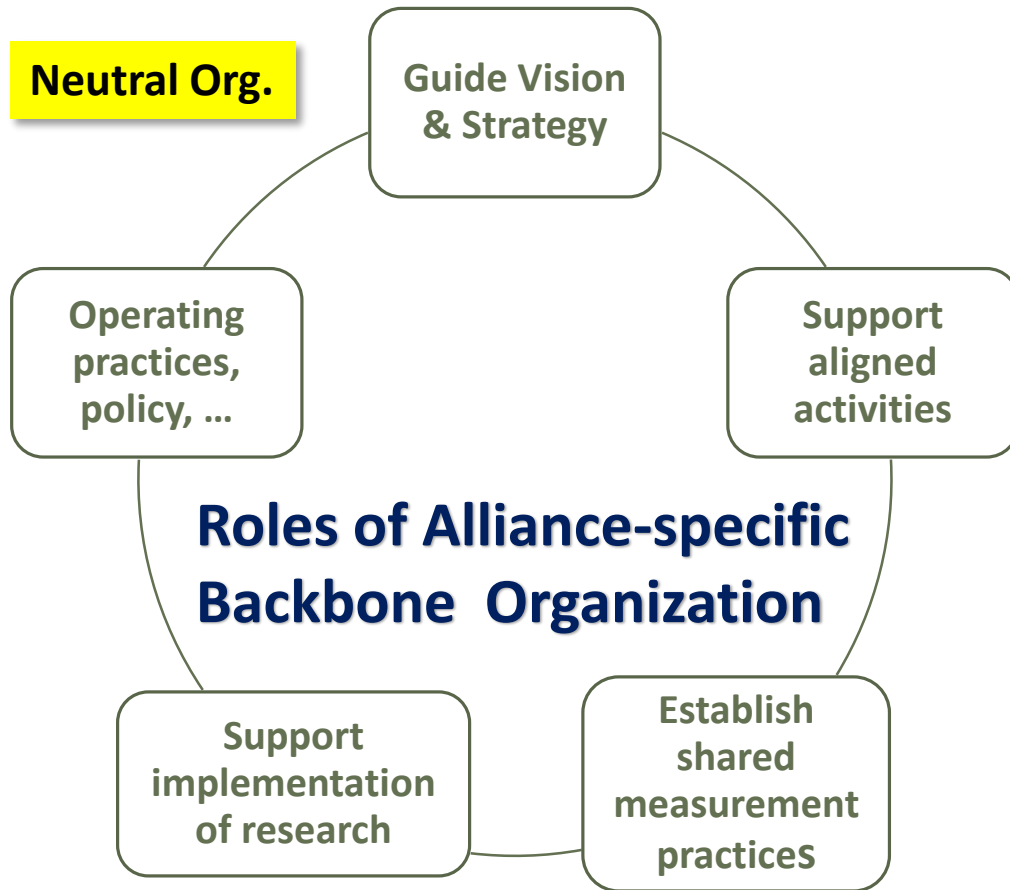


NSF INCLUDES Alliances

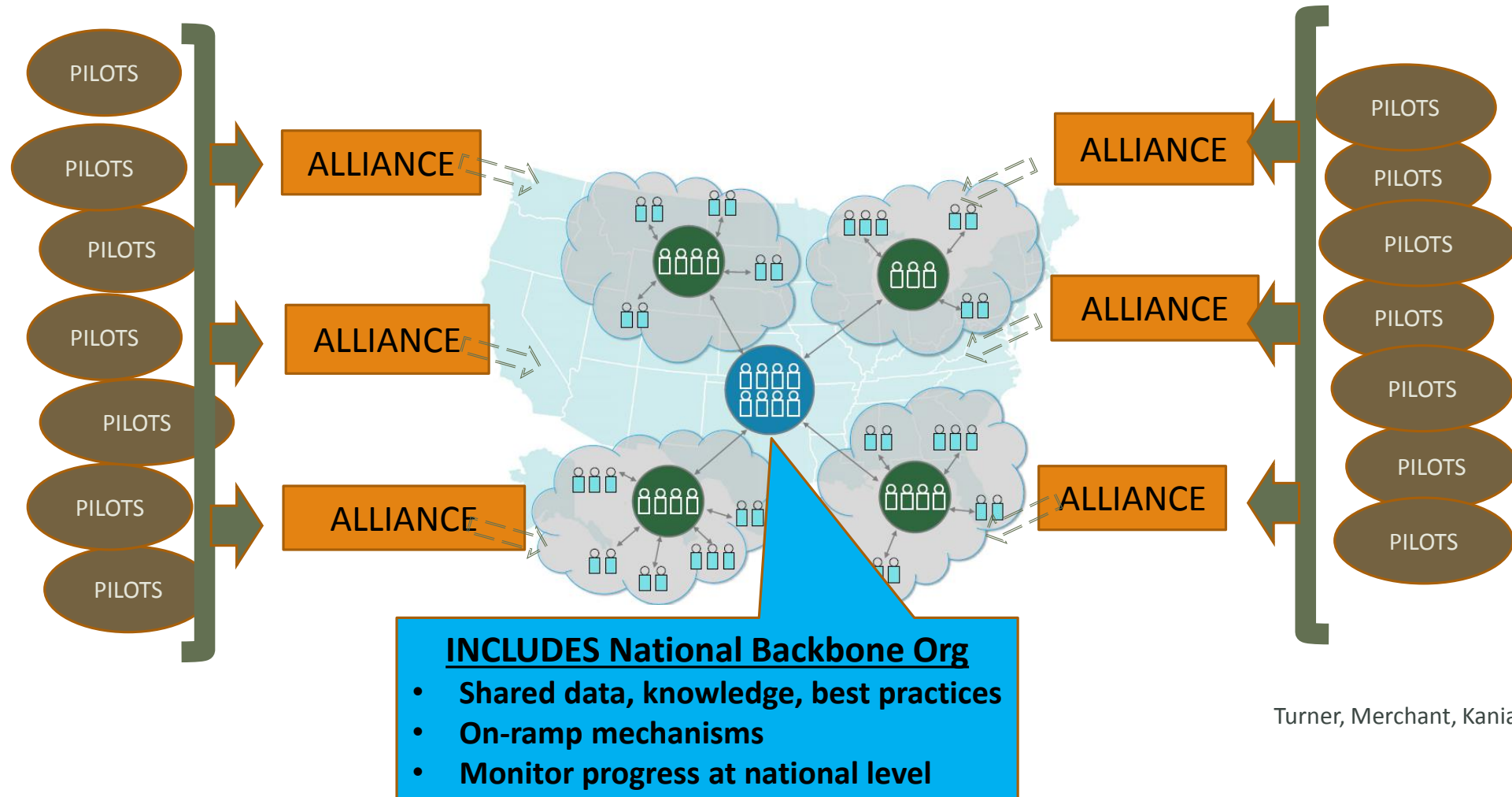
- ❖ Up to five NSF INCLUDES Alliances will be funded beginning in FY 2017
- ❖ Alliances will involve the most promising launch pilot activities
- ❖ Design and Development Launch Pilots may be reconfigured by adding new partners, collaborators or networks = new Alliance team
- ❖ Alliances may focus on emerging fields in science and engineering or established fields - key is to advance BP

Each Alliance to be funded for 5 years at \$2.5M per year

Sample (and partial) NSF INCLUDES Alliance Architecture



NSF INCLUDES National Network



Turner, Merchant, Kania & Martin, 2012.



NSF 16-081

Dear Colleague Letter: Call for Submission of Conference Proposals to Inform the Design and Success of the Alliances and National Network for NSF INCLUDES

Budget: Up to \$250,000

Deadline: July 11, 2016



Backbone Organizations

- ❖ Backbone Organizations for Individual Alliances (Alliance-specific Backbone)
- ❖ Backbone Organization for the NSF INCLUDES National Network



Alliance-specific Backbone

- ❖ Guide vision and strategy
- ❖ Support aligned activities with the partners
- ❖ Established shared measurement practices
- ❖ Build toward the goal & activities among the larger community where Alliances operate
- ❖ Support implementation research
- ❖ Advance policy, operating practices, and relationships
- ❖ Mobilize support with partners



Backbone Organization for the NSF INCLUDES National Network

- ❖ Share data, knowledge, best practices among Alliances
- ❖ Offer approaches for new organizations to join the NSF INCLUDES National Network
- ❖ Provide technical assistance to new Alliances
- ❖ Monitor progress in broadening participation at the national level
- ❖ Support the use of collective impact-style activities and implementation research



Conference Proposals Should:

- ❖ Include new ideas to leverage research, effective practices, and emerging technologies across collaborations found in Launch Pilots, Alliances, and the National INCLUDES Network
- ❖ Build on proven mechanisms of success with technical assistance support structures, resource networks, centers, etc. to create communities of practice
- ❖ Focus on exemplary and/or innovative ideas supported by research to design the infrastructure to *Mobilize, Coordinate, Facilitate* and achieve a continuous state of planning, execution and evaluation among NSF INCLUDES participants



How can Backbone Organizations support:

- ❖ Vision Develop and alignment?
- ❖ Shared measurement practices?
- ❖ Implementation research and evaluation?
- ❖ Public support and engagement?
- ❖ Policy change and implementation?
- ❖ Leveraging funds?
- ❖ Communication?



Conference Design

Engage a range of stakeholders and organizations (K12, 2-year and 4-year postsecondary institutions, philanthropic and community-based organizations, businesses)

2-3 day meeting

Include creative approaches as appropriate – virtual, crowd sourcing, social networking, Wikis

Conferences may convene

- In the fall of 2016 (early) but no later than spring 2017 (later)

Contrast collective impact model with:

-other models for scaling and sustaining social innovation

-models used to address grand challenges in broadening participation in STEM

Specify if the meeting will address mini-backbone, national backbone, or both



Competitive Conference Proposals will address:

- ❖ Goals and objectives for conference activity
- ❖ PI and organizing committee expertise
- ❖ Background and experience with organizational change, broadening participation, collective impact, or similar frameworks
- ❖ Essential component of the backbone infrastructure at the level of the Alliances and/or National Network
- ❖ Suggested presenters/invitees; Proposed topics/sessions/draft agenda
- ❖ Assessing participant feedback; engaging with participant communities
- ❖ Timeline and venue
- ❖ Use of novel, innovative features in alliances and network to leverage technology and advance NSF INCLUDES
- ❖ Framework for the conference report, due summer 2017



Conference Proposal Deadline

Deadline

- **Full proposals due: July 11, 2016**

Number of awards: 10-12 conferences

Budget: Up to \$250,000 each



INCLUDES Timeline

Development

- **Launch Pilots** – NSF 16-544
- **Workshops for Backbone Organizations** – DCL 16-081
- **Assessment & Evaluation**

2016

Implementation

- **Alliances** (up to 5 at \$12.5M)
- **Launch Pilots**
- **Linkages to NSF BP portfolio**
- **National Backbone Organization**
- **Assessment & Evaluation**

2017

Expansion

- **Alliances**
- **National Backbone Organization**
- **Linkages to BP portfolio**
- **Assessment & Evaluation**

2018 - 2021



Merit Review Criteria

Intellectual Merit — the potential to advance the knowledge

Broader Impacts — the potential to benefit society and contribute to the achievement of specific, desired societal outcomes



Merit Review Criteria

The following elements are considered in the review of both intellectual merit and broader impacts:

- ❖ What is the potential for the proposed activity to
 - a. **Advance knowledge** and understanding within its own field or across different fields (Intellectual Merit); and
 - b. **Benefit society** or advance desired societal outcomes (Broader Impacts)?
- ❖ To what extent do the proposed activities suggest and explore creative, original, or **potentially transformative** concepts?



Merit Review Criteria

The following elements are considered in the review of both intellectual merit and broader impacts:

- ❖ Is the plan for carrying out the proposed activities **well-reasoned**, well-organized, and based on a sound rationale? Does the plan incorporate a **mechanism to assess success**?
- ❖ How **well qualified** is the individual, team, or organization to conduct the proposed activities?
- ❖ Are there **adequate resources** available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?



Useful Resources

Dear Colleague Letter: NSF 16-081

Solicitation: NSF 16-544

Email: NSFINCLUDES@nsf.gov

NSF INCLUDES website:

http://www.nsf.gov/news/special_reports/nsfincludes/index.jsp

Grant Proposal Guide, January 2016:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg



Useful Resources

- ▶ NSF: www.nsf.gov
- ▶ Guide to Programs: www.nsf.gov/funding/browse_all_funding.jsp
- ▶ Award Information: www.nsf.gov/awardsearch
- ▶ FastLane: www.fastlane.nsf.gov
- ▶ Funding Opportunities: www.nsf.gov/funding

Questions?

